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ABSTRACT

This study examined the relationship between multiple school transfers during elementary school and student academic achievement. Participating in the study were 105 sixth graders enrolled in a northeast Tennessee middle school. Data were collected by means of examination of school records to determine student mobility, and student scores on the Terra Nova Achievement Test (language, reading, mathematics, and overall composite). Four groups of students were identified: (1) 30 students randomly selected from the group of students who had transferred one time or not at all during the elementary school years; (2) 30 students randomly selected from those who had moved twice; (3) 17 students who had moved 3 times; and (4) 28 students who had moved more than 3 times. The findings revealed a significant correlation between multiple school transfers and student achievement scores. There were also significant differences in test scores between students who had transferred one time or less and students who had moved two times, three times, and more than three times. No other significant achievement differences were found among the four groups of students. It was concluded that students who remain in the same school or transfer only once have better academic achievement than more mobile students, and that after two moves, additional moves do not lead to further academic harm. (Contains 12 references.) (KB)

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Running head: MULTIPLE SCHOOL TRANSFERS AND STUDENT ACHIEVEMENT

The Relationship between Multiple School Transfers During Elementary Years and Student Achievement

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Abstract

The purpose of this study was to determine the relationship between multiple school transfers and academic achievement and to examine any difference in the academic achievement of mobile and non-mobile students. The sample for this study was 105 sixth grade students from a school system in Northeast Tennessee. Data were collected through examination of school records to determine student mobility and achievement test scores. Data were analyzed using a Pearson's Product Moment Correlation and One-Way ANOVA. Results of the Pearson's Product Moment Correlation indicated a relationship between multiple school transfers and academic achievement. The Analysis of Variance indicated a significant difference in the test scores of students that moved zero or one time and two, three, or more than three times. No significant difference was found between students that moved two and three times or three or more moves or between three moves and more than three moves. The findings of the study indicated that student would benefit from programs to decrease school mobility.

Review of Literature

The United States is a highly mobile country. As reported by the U.S. Census Bureau in 1997 between March of 1996 and March of 1997, over 43 million Americans, approximately 16.5% of the population, changed residences. This statistic could be broken down into 27.7 million of the movers moved to a new residence within the same county, 7.9 million moved between counties in the same state, and the remaining 6.3 million changed states (U.S. Census Bureau, 1997). Additionally, 28 million Americans who moved were families that were in housing that was being rented and they tended to remain in the same residence for an average of only 2.1 years (U.S. Census Bureau, 1997). When educators examine these figures it is evident that there would be an extensive amount of school mobility as a result of high transience rate in the United States.

Educators recognize the importance of students remaining in a constant learning environment in order to learn the skills necessary today to succeed in society. In the annual report to Congress, Condition of Education Report 1995 from the National Center for Education Statistics, Snyder and Wirt reported that 31% of the eight grade class of 1988 changed schools two or more times after entering first grade. Upon closer examination of the study, the data showed that white students were less

likely to move than black or Asian children were. When both a mother and father were present students were less likely to have changed schools two or more times between first grade and the middle of eighth grade than were students who lived with other types of families. Additionally, students in low-income families, families that have an income under $10,000 were more likely to change schools two or more times after entering first grade than families whose income was $20,000 or more a year (Snyder & Wirt, 1998).

The General Accounting Office conducted a study in response to questions asked by Representative Marcy Kaptur about children who change schools frequently. The GAO determined that one in six third graders have attended at least three different schools since the beginning of first grade. The GAO defined mobility by looking at the number of times a student changed schools during the 1990-91 school year. Approximately 15,000 third-graders and their parents, teachers, and school principals completed questionnaires. The study determined that of the nation's third graders who changed schools frequently, about 17%, 41% were below grade level in reading and 33% were below grade level in math. Additional findings of the GAO were that inner city and low-income children were much more likely to change school frequently. Students who change schools frequently were more likely to repeat a grade than

children who did not change schools frequently. Third graders who change schools frequently are more likely than those who have never changed school to be below grade level in reading and more likely to repeat a grade, regardless of income. The students were also more likely to have behavior problems and 10% of students that change frequently are reported to have nutritional problems (General Accounting Office, 1994).

Studies on multiple school transfers or student mobility and the impact on students have varying findings and multiple implications to education. Prevailing thought on the subject showed that most researchers have determined a negative relationship between student mobility and the student (Nelson, Simoni, & Adelman 1996; Walters, 1996; Mehana & Reynolds, 1995; Hefner, 1994; Ligon and Paredes, 1992; Cleveland Public Schools, 1989; Benson, Haycraft, Steyaert, & Weigel, 1979). A factor in adjusting to school moves is the reason for the school moves. Students that transfer schools because their family had to move as a result of loss of housing and other household considerations such as divorce and financial difficulties had poorer academic performance than children who were transferring school because they were leaving a school in a violent neighborhood to go to a new neighborhood because of increasing socioeconomic status (Warren-Sohlgerg & Jason, 1992).

In 1979, Benson, Haycraft, Steyaert, & Weigel studied the relationship between mobility and academic achievement, classroom adjustment, and socioeconomic status. The study examined data collected from 1,007 sixth grade students in Larimer County, Colorado during the 1977-78 school year. The study used the students' records to determine data related to achievement, socioeconomic status and a classroom behavior inventory to measure adjustment. When determining mobility the researches found that only 20% of the sixth graders in the study had been in the same school since kindergarten. Students who had a higher rate of mobility were determined to have lower achievement score on the Reading Subtest of the Stanford Achievement Test.

Mao, Whitsett, & Mellor (1997) conducted another study of similar nature in Texas in a study by the Texas Education Agency to clarify the relationship between mobility and student achievement and district performance. The study determined the amount of mobility in the schools and districts, from what socioeconomic class they were from, and the relationship between mobility and academic achievement. Mobility was defined as changes from school to school during the year and between year. Mobility that was calculated within the school year was tabulated every six weeks and mobility between school years was calculated once a year. Because mobility during the year was calculated once a six weeks

the greatest number of times a student was recorded to change schools in this study was six times a year even if they changed schools more than six times. Academic achievement was measured using the reading and mathematics scores of the Texas Assessment of Academic Skills (TAAS). The researches found that mobility rates were higher for economically disadvantaged children. Early elementary grades (preK-3) were more likely to move than those enrolled in upper elementary grades and one out of six students changed schools at least once during the 1994-1995 school year in Texas public schools. When examining the relationship between mobility and academic performance the researchers determined that the mobile student scored lower on mathematics and reading tests than stable student with score ranging anywhere from 11 to 21 points lower. Furthermore, students that moved intradistrict score three to six points lower than students that were moving interdistrict. The researchers concluded that it would be beneficial to students if the districts worked together to keep children in the same school throughout the year (Mao, et. al. 1997).

A study by Audette, Algozzine, & Warden in 1993 on mobility and student achievement was conducted in 72 elementary schools in the southeast where third grade students were evaluated by their achievement scores on the California Achievement Test. Mobility was

calculated by the ratio of students entering and leaving the school to the total number of students enrolled during the year. This study compared entire schools to one another based on their calculated mobility. The 11 schools that were determined to have the highest mobility had lower scores on the California Achievement Test than the schools that did not have high rates of mobility. Differences in scores ranged from 25.3 percentage points in mathematics to 30.7 percentage points on the total battery score when compared to schools with low mobility and ranged from 14 to 17 percentile points lower than the other schools in the districts (Audette, Algozzine, & Warden, 1993).

Contrary to studies that showed a relationship between mobility and negative academic achievement, there were several studies that do not show mobility to have a negative relationship with academic achievement. A study in 1987 by Marchant & Medway investigated the influence of mobility on military families. The researchers examined how distance, recency, and location of the move affected the children. The study was conducted with 40 families from Fort Jackson Army Base. Children in the study showed that moves positively impacted academic achievement. Students in the military who frequently moved were shown to participate in more activities and organizations that positively impacted school achievement. It should be noted that another factor that may contribute to

lack of negative results from mobility was that the curriculum was relatively standard from one base to another so children did not have to adjust to a new curriculum in addition to a residential move as non-military children did.

In this study the effect of multiple school transfers on academic achievement was investigated. Multiple school transfers was defined as more than one move to a new school anytime during the elementary years (K-5). Mobility was only used in relation to school moves and not residential moves because students can make residential moves and remain in the same school. The hypothesis was put forth that there would be a significant relationship in the achievement scores of students that have multiple school transfers (two or more) when compared to students who have remained in the same school or transferred only once during the elementary years. Also it was put forth that there would be a difference in the academic achievement between students who transferred schools more than one time and those who transferred zero or one time.

Methodology and Procedures

The population for this study was 489 sixth grade students in Kingsport City Schools, a district in a small Northeast Tennessee city. The 1997-1998 Report Card reported that during the 1997-1998 school

year, there were 6,244 students enrolled in Kingsport City Schools. Of these students enrolled, 91.2% were Caucasian, 6.9% were African American, 1.3% were Asian, and .5% were other races. 36% of the students received free/reduced lunch and 20.7% of the students qualified for special education services. Kingsport City Schools has eight elementary schools, two middle schools, and one high school.

The sample for this study consisted of students that were enrolled in sixth grade in Kingsport City Schools during the 1997-1998 school year. All sixth grade students were enrolled at the same middle school during the 1997-1998 school year as a result of facility renovations taking place at one of the middle schools. Students included in the study were enrolled in Kingsport City Schools at the time the Terra Nova Achievement test which was administered during the week of March 30th through April 3rd 1998.

The sample for the study consisted of four groups selected from the whole population. Each group was to be made up of 30 students. The first group was made up of 30 students who were randomly selected and had transferred zero or one time during the elementary years (K-5). The second group was made up of 30 students who were randomly selected and had moved two times. Within the population for the study, there were not 30 students to fill the remaining categories of three moves and more

than three moves. Therefore the third was made up of all 17 students who had moved three times. And the fourth group was made up of all 28 students who had moved more than three times.

The data collection instrument for this study was the Terra Nova achievement test. The Terra Nova was used because it was the test selected by the Tennessee Department of Education to be administered each spring to Tennessee students in grades three through eight. The Terra Nova test was used in Tennessee the first time during the 1997-1998 school year. The test replaced the TCAP achievement test to comply with legislation requiring the "use of non-redundant items each year TCAP achievement tests were administered" (Department of Education, 1998). The Terra Nova test was also selected because of greater alignment of curriculum, instruction, and assessment. There was a high correlation between the Terra Nova test content and Tennessee's curriculum frameworks for elementary grades (Department of Education, 1998).

Procedures

The procedures that were followed in this study included writing a letter of permission to the Director of Schools of Kingsport City Schools to use data from student records related to Terra Nova scores and school

enrollment history. Permission was then obtained from the principals of the two middle schools where records would need to be accessed.

The population included sixth grade students who took the Terra Nova achievement test in the spring of 1998. The sample was obtained by examination of all records of students that were tested by the Terra Nova in the spring of 1998. The sample for the study consisted of four groups selected from the whole population. Each group was to be made up of 30 students. The first group was made up of 30 students who were randomly selected and had transferred zero or one time during the elementary years (K-5). The second group was made up of 30 students who were randomly selected and had moved two times. Within the population for the study, there were not 30 students to fill the remaining categories of three moves and more than three moves. Therefore the third was made up of all 17 students who had moved three times. And the fourth group was made up of all 28 students who had moved more than three times.

Data were collected by examining the records of students in the sample. Information was recorded in chart form as to the number of times a student moved during the elementary years, test scores on the Terra Nova exam for language, reading, mathematics, and overall composite. To determine if there was a relationship between multiple school transfers

and academic achievement a Pearson's Product Moment correlation was used. Data were then examined to determine if there was a significant relationship and how the number of times a student transferred during the elementary years correlated with academic achievement.

Results

Two research questions were used to guide the analysis of the data. Each research question was followed by a research hypothesis. Research question1 was analyzed by using a Pearson's Product Moment Correlation at .01 level of significance and Research question 2 was analyzed using ANOVA at .05 level of significance.

Research Questions

1: Is there a relationship between multiple school transfers and student achievement scores during the elementary years as evidenced by Terra Nova scores of sixth grade students in Kingsport City Schools.

2: Is there significant difference among the test scores of students who do not transfer schools and those students that transfer school two, three, or more than three times during the elementary years (K-5)?

The results of Pearson's Product Moment Correlation indicated a significant relationship ($r=.36, p<.01$). Therefore the null hypothesis was rejected. Similarly, the results of ANOVA indicated a significance difference among the test scores of students who do not transfer schools

and those students that transfer two, three, or more than three times. The results are displayed in Table 1. Scheffe post hoc test revealed significant difference in the test scores between students that transferred zero or one time and students that moved two times, three times, and more than three times. No significant results were found between two moves and three moves, or more than three moves or between three moves and more than three moves. The results are displayed in Table 2.

Table 1

Summary of ANOVA for School Moves and Terra Nova Scores

Source	SS	Df	MS	F	Sig.
Between	20302.80	3	6767.60	13.250	.000*
Within	51588.11	101	510.77		
Total	71890.91	104			

*Note. $p<.05$

Table 2

Summary of Multiple Comparisons between Number of School Moves and Terra Nova Scores

No. of School Moves	No. of School Moves	MD	Pv
0 or 1	2 moves	33.37	.000*
	3 moves	27.51	.002*
	more than 3 moves	29.07	.000*

*Note. p< .05 level.

Discussion

When a relationship between multiple school transfers and student achievement scores during the elementary years as evidenced by Terra Nova scores of sixth grade students in Kingsport City Schools was examined the results indicated a significant relationship (r=. 36, p<. 01) therefore the null hypothesis was rejected.

From the data analysis, inferences can be made to conclude that students that remain in the same school or transfer only once have better academic achievement than those that transfer more than once. Many of the students that transferred one time had moves that could be associated with increased socio-economic status. Therefore the moves would be construed as positive to the overall well being of the student and would not negatively impact the academic achievement of the students. These moves also occur during the summer break and were less likely to cause additional trauma to the child by making him/her transfer schools during the middle of the school year and causing an interruption in the student's learning.

Conversely, when a student exhibited multiple school transfers the student had lower academic achievement. Multiple school transfers result in a student having to making adjustments not only to a new home environment but also to a new school with different expectations, a new

teacher, new classmates, and new curriculum and textbooks if the move is out of district or state. There are many variables that, along with the mobility of the students, would negatively influence his/her academic achievement such as lower socio-economic status and lack of housing. In the school system where the study was conducted, there is a lack of readily available, affordable housing. Many lower socio-economic families must double-up with other friends or family members while they are looking for new housing. This often can result in a school transfer if the family resides in another school zone and unable to continue transporting the child to the original school. Additionally, the experience of the researcher has led to conclusions that when a family loses their housing or must move because of difficulties with their housing, the parents spend much of their energy to locate housing or coping with the crisis that resulted in having to move and are unable to devote time to assisting their children on their schoolwork. These factors along with moving to a new school are possible variables which along with mobility impact a student's academic achievement.

In regard to research question #2, is there a difference among the test scores of students who do not transfer schools and those that transfer school two or more times during the elementary years (K-5), an Analysis of Variance was conducted to determine if a significant difference existed.

The results indicated a significant difference when comparing the test scores of students that had remained stable and students that transferred school two or more times therefore the null hypothesis was rejected. There was no significant difference in the test scores of students that were mobile (transferred schools two or more times) leading the researcher to conclude that after two moves any additional moves do not cause further harm academically. Because of other possible intervening variables, it is difficult to determine why there were no significant differences in the academic achievement of student that transferred more than two times. Many of the students that had more than three moves also qualified for Special Education Services. The interventions provided by the school system may account for the lack of significant difference. Teachers were able to access special services and provide extra academic assistance to the mobile student.

The findings from the conducted research are consistent with the findings of Marchant and Medway (1987), Warren-Sohlberg & Jason (1992), Mehana and Reynolds (1995), Mao, Whitsett, & Mello (1997), and Hefner (1994) Studies by Marchant and Medway (1987) and Warren-Sohlgerg & Jason (1992) suggest that moves which are the result of increasing socio-economic status are consistent with the conclusions from this study. Students that transferred to schools from a poorer

neighborhood to a more affluent neighborhood did not exhibit a lower academic achievement. In this study, students that moved one time were often the students that had the highest test scores on the Terra Nova achievement test. The research was further consistent with other studies conducted by Mehana and Reynolds (1995), Mao, Whitsett, & Mellor (1997) and Hefner (1994) and demonstrated that the students that had the most mobility were often the students transferring among the schools with a larger percentage of students belonging to a lower socio-economic status. This leads the researcher to conclude that mobility is often correlated to lower socio-economic status and therefore the students are not performing as well academically as the more advantaged students.

Conclusions

The research was conducted to determine if a relationship existed between multiple school transfers and academic achievement. Results indicated that there was a significant relationship between the two variables. Furthermore, the results of the study also demonstrated that there was a significant difference in the test scores of students that had transferred zero or one time and students that transferred two or more times. It should be noted that there was no significant difference in the test scores between students that had transferred two times and three

moves or more than three moves indicating that only after the one move does academic achievement begin to be impacted negatively.

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